

To: Reed, Marissa[marissa_reed@fws.gov]; DeLancey, George J CIV CELRL CELRD (US)[George.J.Delancey@usace.army.mil]
From: Schaller, Andrea
Sent: Thur 12/15/2016 6:21:57 PM
Subject: FW: FW: 7 hills permit
Peabody Seven Hills NESA DOI Office of Policy Analysis comments_pfh.pdf

Marissa and George

Here is the feedback we got from DOI's expert on HEA and our 404 mitigation expert at HQ. Would you want to discuss some technical details prior to meeting with Peabody? Palmer is also willing to call into the meeting with Peabody if needed and he is available.

Andrea

Andrea Schaller

USEPA-Region 5

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312-886-0746

From: Hough, Palmer
Sent: Tuesday, December 13, 2016 1:37 PM
To: Schaller, Andrea <schaller.andrea@epa.gov>
Cc: Landers, Timothy <Landers.Timothy@epa.gov>; Melgin, Wendy <melgin.wendy@epa.gov>
Subject: FW: FW: 7 hills permit

Andrea:

One of DOI's HEA experts (Peter Grigelis) reviewed the 7 Hills HEA doc that you shared with us. Below are of his general comments. He also made comments in the attached PDF. I reviewed the document as well and added my comments on top of Peter's.

Some of my major take-aways:

- [REDACTED] HEA appears to be an appropriate tool for use in the 404 context (although no examples are cited of its use in the wetland 404 context – the only examples Peabody points to are from FL and are from the context of coral reefs, shallow marine waterbottoms and other marine resources). So there does not appear to be much precedent for its use here (not saying they can't use it). What is typically used in Indiana to determine wetland credits and debits (and why are they not using that)?
- [REDACTED] My major concerns have to do with how the tool is being used including: some baseline condition scores appear to be artificially low, some post-reclamation scores seem unrealistically high, and assumptions about recovery rates seem unrealistically optimistic.
- [REDACTED] These flawed inputs produce the generous (and questionable) mitigation ratios described in the document.
- [REDACTED] We should be taking a very hard look at all of the inputs used in this HEA and making sure they are backed up by the literature and field data from the site.
- [REDACTED] This also looks like a first cut, the document reads in some parts like they will be doing another cut at the document that will be based on actual data collected in the field vs desk-top analysis. We should encourage that.

How did your meeting with the Corps go?

-Palmer

From: Grigelis, Peter [mailto:peter_grigelis@ios.doi.gov]
Sent: Monday, December 12, 2016 10:27 AM
To: Hough, Palmer <Hough.Palmer@epa.gov>
Cc: Glomb, Steve <steve_glomb@ios.doi.gov>; Benjamin Simon <Benjamin_Simon@ios.doi.gov>; Skrabis, Kristin <kristin_skrabis@ios.doi.gov>
Subject: Re: FW: 7 hills permit

Hi Palmer,

Attached are comments on the 7 Hills Permit HEA in addition to a few below. Kristin Skrabis in my office was very instrumental in the review of the analysis. The more detailed comments can be found in the attached PDF file. Let us know if you have any questions.

- In general, using HEA/REA in this context is reasonable.
- There are some concerns with how the inputs were developed, including interpretation of the literature.
- The analysis seems to rely on the approach taken in the Hylebos NRDAR, which is an old example and not really consistent with current HEA applications.
- The decision to combine the different habitat types into one HEA is not clear and adds to the level of uncertainty over the calculations.
- It is difficult to verify the calculations/results presented in the report without the actual spreadsheets. For example, it isn't clear if the analysis accurately captures certain habitats lost in perpetuity (see Table 1 ... Palustrine Scrub-shrub Wetland, Palustrine Emergent Wetland, and Palustrine Unconsolidated Bottom).

Thanks,

Pete

Peter E. Grigelis, Ph.D

Economist

Office of Policy Analysis

U.S. Department of the Interior

202-208-7786

peter_grigelis@ios.doi.gov

On Mon, Dec 5, 2016 at 3:01 PM, Hough, Palmer <Hough.Palmer@epa.gov> wrote:

Many thanks Steve!

From: Glomb, Steve [mailto:steve_glomb@ios.doi.gov]
Sent: Monday, December 05, 2016 1:40 PM
To: Hough, Palmer <Hough.Palmer@epa.gov>
Cc: Benjamin Simon <Benjamin_Simon@ios.doi.gov>; Peter Grigelis <Peter_Grigelis@ios.doi.gov>
Subject: Re: FW: 7 hills permit

Palmer -

One of the economists down the hall from me in the Office of Policy Analysis will be able to take a look at your HEA. The plan is to get something back to you at the end of next week. I'll be on travel then, so they'll send it directly to you. Hope that's a help. If your meeting with the Corps provides any wiggle room in the timing please let Ben and Pete (copied here) know.

Take care,

Steve

Steve Glomb, Director

Office of Restoration and Damage Assessment

U.S. Department of the Interior

202-208-4863

steve_glomb@ios.doi.gov

On Fri, Dec 2, 2016 at 9:28 AM, Hough, Palmer <Hough.Palmer@epa.gov> wrote:

Steve

Thanks for helping find a HEA expert to help review the attached HEA analysis. I understand that it is not reasonable to expect any feedback on this by Monday but would it be possible to get some feedback within 1-2 weeks?

I'm looping in the FWS lead with the Bloomington office as well. EPA and FWS are meeting with the Corps next Tuesday to discuss this project. At this point I think we are just going to say that we are reviewing the HEA and will provide comments later but that we are concerned that the tool might not have been applied appropriately in this context and that we have concerns with some of the inputs used and assumptions made.

Thanks for any input you HEA folks can offer.

-Palmer

From: Glomb, Steve [mailto:steve_glomb@ios.doi.gov]
Sent: Thursday, December 01, 2016 5:22 PM
To: Susan.Stedman@noaa.gov; Hough, Palmer <Hough.Palmer@epa.gov>
Cc: Landers, Timothy <Landers.Timothy@epa.gov>
Subject: Re: FW: 7 hills permit

Palmer and Susan-Marie -

I am certainly no HEA expert, but I do know a few. Please let me know if you want me to try to find one to help you with this issue on such short notice. Can't guarantee that they'd be able to drop what they're doing and get you something by Monday.

Steve

202-208-4863

steve_glomb@ios.doi.gov

On Thu, Dec 1, 2016 at 2:10 PM, Susan-Marie Stedman - NOAA Federal <susan.stedman@noaa.gov> wrote:

OK, I'll see what I can do. Have you reached out to Steve Glomb at DOI? steve_glomb@ios.doi.gov Don't know if he's a HEA expert but he probably knows one or two.

On Thu, Dec 1, 2016 at 11:19 AM, Hough, Palmer <Hough.Palmer@epa.gov> wrote:

Susan-Marie

We would appreciate any initial feedback by COB Monday b/c our folks are meeting with the Corps on Tuesday AM to have initial discussions.

Additional feedback would be appreciated within a week.

Is that doable?

-Palmer

From: Susan-Marie Stedman - NOAA Federal <susan.stedman@noaa.gov>
Sent: Thursday, December 1, 2016 10:03:37 AM
To: Hough, Palmer
Cc: Landers, Timothy
Subject: Re: FW: 7 hills permit

What's your time frame on needing an answer? I can ask our top-notch economist to look at it, but that might take a few weeks. If you need

an answer ASAP there are others I could ask.

One thing that jumps out at me right away is their calculations are based on a time frame of "in perpetuity". HEA was not designed to be used that way, and if you think about it, if your time frame is infinity, any difference between the ecosystem services provided by a pre-development site and a post-development are negligible.

But that's my gut feeling, let's wait and hear what the experts think.

On Wed, Nov 30, 2016 at 4:01 PM, Hough, Palmer <Hough.Palmer@epa.gov> wrote:

> Susan-Marie

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> I was hoping that you might be able to help us out. Peabody Coal has used
> HEA to assess its 404 mitigation requirements for a proposed coal mine in
> Indiana. I am not familiar with HEA being used in the 404 context before
> (despite what Peabody says in its report). I was wondering if you could
> help us determine 1) if it is appropriate to use HEA in the 404 context and
> 2) if so, whether Peabody have appropriately applied HEA based on the
> attached report.

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> Is this something that you or someone else at NOAA could assist us with?

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> Thanks, Palmer

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> From: Schaller, Andrea

> Sent: Wednesday, November 30, 2016 9:22 AM

> To: Hough, Palmer <Hough.Palmer@epa.gov>

> Cc: Landers, Timothy <Landers.Timothy@epa.gov>

> Subject: FW: 7 hills permit

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> Palmer

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> We received this Habitat Equivalency Analysis from Peabody for use on their
> seven hills mine in Southern Indiana. Impacts are to bottom land forested
> wetlands, we wrote a joint letter with FWS and also have written "a" and "b"
> letters. FWS also did separate "a" and "b" letters. The Corps agreed with
> us to required an EIS but allowed the company address their concerns with
> FWS and EPA and get the review under an EA, they have until May 9th to get
> us to resolve issues or provide list of consultants to do the EIS to the
> Corps.

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> So Peabody drafted this as an attempt to address concerns. To be frank it

> does not, however, wanted to get feedback on the use of Habitat Equivalency

> Analysis for 404 mitigation.

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> Would appreciate your view point, we are meeting with the Corps and FWS

> early next week to discuss the project, this analysis and next steps.

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> Andrea

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> From: Swenson, Peter

> Sent: Wednesday, November 16, 2016 2:36 PM

> To: Schaller, Andrea <schaller.andrea@epa.gov>; Melgin, Wendy

> <melgin.wendy@epa.gov>

> Subject: Fwd: 7 hills permit

>

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>

> FYI

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> Sent from my iPhone

>

>

> Begin forwarded message:

>

> From: "eric fry" <ericfryllc@yahoo.com>

> To: "Swenson, Peter" <swenson.peter@epa.gov>

> Cc: "Bryce West" <bwest@peabodyenergy.com>, "Ken M. Rogers"

> <kgrogers@peabodyenergy.com>

> Subject: 7 hills permit

>

> Peter

>

> I am not sure if you meant you would meet with the ACOE in 2-3 weeks or you

> hoped to meet with us in 2-3 weeks.

>

> I have attached a NESA analysis of the site and reclamation plan. I am not

> sure if you are familiar with NESA analysis. It is used everyday by DOI,

> F&W, and the states in NRD/CERCLA cases. No doubt some in EPA are very

> familiar with it and the ACOE has also used it to develop mitigation ratios

> for new projects.

>

> I am sure that you recall our repeated concern about the lack of protocol

> used in determining compensatory mitigation for coal projects in Indiana.

> This lack of regulatory certainty is a huge issue for capital intensive

> industries like mining. We need to have a good idea of requirements without

> waiting 5 years and spending large amounts of capital. We began to search

> for an idea on our own because we did not feel that progress was otherwise

> being made.

>

> NESA analysis using HEA looked as though it might be suitable.
 >
 > It is restoration based compensation.
 > It has been repeatedly accepted by the courts.
 > It is used by the federal government and states on a daily basis.
 > Its involves a system of credits and debits based on the environmental
 > services of habitats as determined by scientific publications, precedents,
 > and BPJ.
 > It includes a social discount rate designed to account for temporal loss.
 >
 > ENVIRON conducted the analysis for 7 Hills. ENVIRON conducts and negotiates
 > a large number of NESA analysis making them a excellent choice to do the
 > analysis in a manner that would be accepted by federal and state government.
 >
 > The conclusion of the ENVIRON analysis finds that the proposed onsite
 > mitigation should be sufficient to compensate for the loss caused by mining.
 > The analysis finds that in 50 years environmental services will double as a
 > result of the enhancements proposed and nearly triple in perpetuity. That
 > sounds like a good investment.
 >
 > I am sure that some folks at regulatory agencies will have a problem with
 > the conclusion of this study based on the amount of past compensatory
 > mitigation they have been extracting from the coal industry. The difference
 > is the quantification using accepted methods. (At this time Peabody still
 > supports the proposal of offsite mitigation even though the analysis does
 > not justify it.)
 >
 > In addition to the NESA analysis it has become apparent that there have been
 > some misconceptions about the site by regulators. In a recent conversation
 > the ACOE was not aware that the site wetlands have been previously farmed
 > (at least 80 %) and that there is nothing rare or unique to be considered.
 > We have clear photographic evidence and professional analysis to confirm
 > these facts. ~500 acres of wetlands seems large but when viewed in context
 > it is a tiny percentage of total wetlands in the watershed.
 >
 > In conclusion, we look forward to meeting with you to discuss these and
 > other issues. Please be specific with any criticisms of the NESA analysis.
 > We can have ENVIRON answer questions on the NESA analysis by phone at
 either
 > our proposed meeting or at separate time.
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 > Thanks
 > Eric
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Susan-Marie Stedman
 NOAA Fisheries
 Office of Habitat Conservation
 301-427-8649

Despite all our efforts to protect them, coastal wetlands are still being lost at a rate of 80,000 acres a year.

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